

ABSTRACT

The rolling bearing apparatus of the present invention comprises a rolling element, a non-rolling element disposed
5 concentrically with the rolling element, and a rotation detector for outputting an input exciting voltage by converting it to an induced voltage according to the relative rotation state of the rolling element and the non-rolling element. The rotation detector comprises a rotor provided in the rolling
10 element, a stator provided in the non-rolling element, and an exciting winding and output windings being wound to the stator. The output windings induce a voltage according to the gap permeance between the rotor and the stator in response to the exciting voltage inputted to the exciting winding.